## Amendments to Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

## Listing of Claims

Claims 1-15 (cancelled).

Claim 16 (new): An image processing method for recovery of a scene structure from successive image data where motion of the scene structure is linear, the method comprising the steps of:

(a)     computing rotational motion in the successive image data using rotational flow vectors derived from a set of intensity data collected from the successive image data;

(b)     constructing a shift data representation for the intensity data that compensates for the rotational motion in the successive image data;

(c)     decomposing the shift data representation into a motion vector and a structure vector;

(d)     dividing the successive image data into smoothing windows; and

(e)     computing a projection matrix which is block diagonal between different smoothing windows and which is used to recover the scene structure by solving for the structure vector.

Claim 17 (new):  The image processing method of claim 16 wherein the shift data representation is decomposed using singular value decomposition.

Claim 18 (new):  The image processing method of claim 17 wherein singular value decomposition is used to compute a rank-1 factorization of $-\Delta_{CH} \approx M^{(1)}S^{(1)T}$ where $M^{(1)}$ is the motion vector and $S^{(1)}$ is the structure vector.

Claim 19 (new):  The image processing method of claim 16 wherein the method is iterated until it converges to a reconstruction of the scene structure.